

“OpenMobile”

Eth0:2011 Winter
January 15, 2011

@phedny / @moenenspace

Outline

- Introduction
- Why?
- What?
- How?

Introduction

- @phedny – Mark van Cuijk
- @moenenspace – Nijmegen hackerspace
- “OpenMobile” – temporary project name



Why?

Tarievenoverzicht Vodafone Bel+Sms+Web

Vodafone Bel+Sms+Web

n. Uw beltegoed is 2 maanden geldig. H
t binnen uw bundel. U ontvangt gratis o

Vodafone Bel+Sms+Web Sim Only 1 Jaar

Vodafone Bel+Sms+Web Sim Only 2 Jaar

met dit abonnement kunt u be
beltegoed is 1 maand geldig. V
ner post kan worden aangevraa

Why?

12 mnd contract: €25,- per order
simonly contract: €30,- per order
24 mnd contract: onderstaande
staffel

1-19 aansluitingen per maand:
€25,- per order
20-50 aansluitingen per maand:
€32,50 per order
51 aansluitingen of meer per
maand €40,- per order

Enkel de orders van 24 mnd
tellen mee voor de staffel.

iPhone: € 14,- per bruto order



Why?

- EU roaming caps
- Outbound calls: €0.40/min (+19% = €0.48)
- Inbound calls: €0.16/min (+19% = €0.19)
- Outbound SMS: €0.11/msg (+19% = €0.12)

Zelf bellen	€ 0,46 /min
Gebeld worden	€ 0,18 /min
Sms versturen	€ 0,13 /sms

Why?

- EU roaming data caps
- Inter-operator cap: €0.50/MB

Internet

€ 3,95 /MB

Why?

- And how about non-EU roaming?

EU	Rest van Europa	VS & Canada	Rest van de wereld	Uitzonderingen
Standaard tarieven binnen de rest van de wereld				Terug naar kaart
	Abonnement	Prepaid	Internet op je laptop	
Zelf bellen	€ 2,25 /min	€ 2,50 /min	Nvt	
Gebeld worden	€ 1,75 /min	€ 2,00 /min	Nvt	
Sms versturen	€ 0,75 /sms	€ 0,75 /sms	€ 0,75 /sms	
Internet	€ 19,90 /MB	Nvt	€ 5,95 /MB	

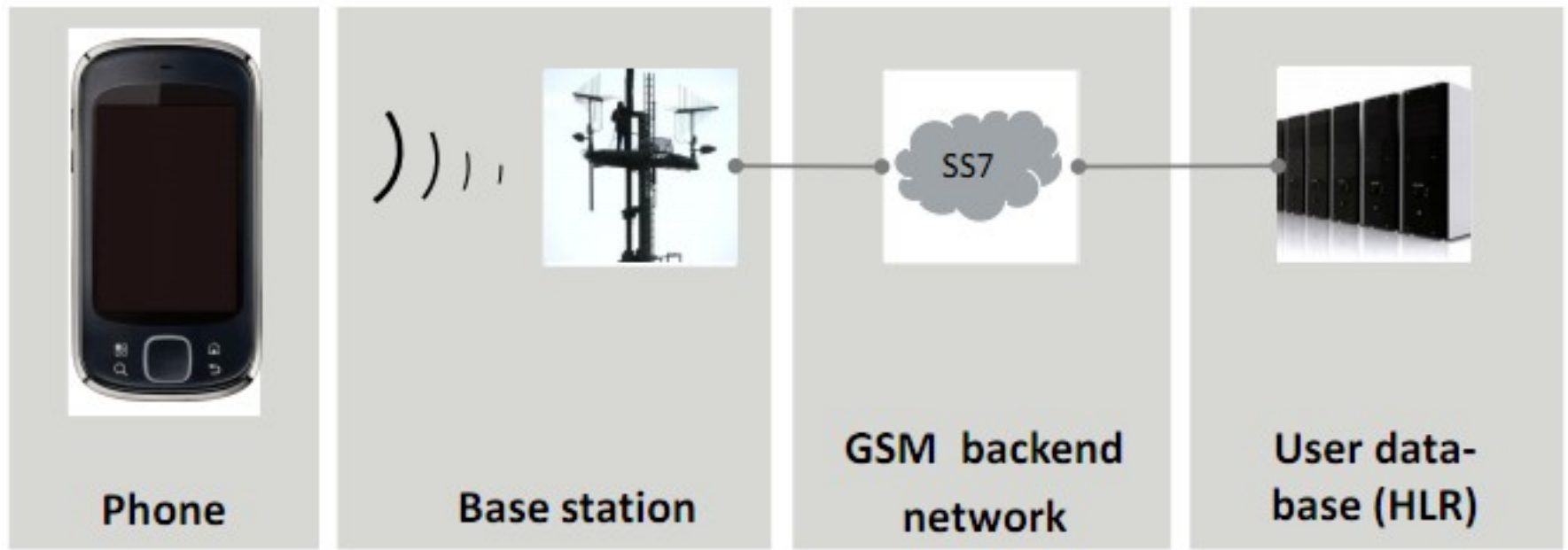
<http://www.kpn.com/prive/mobiel/tarieven/buitenland.htm>

Why?

GSM network wish list

1. *SMS home routing*
2. *Randomized padding*
3. *Rekeying before each call and SMS*
4. *Frequent TMSI changes*
5. *Frequency hopping*

Why?



Why?

- Cost transparency
- Lower roaming cost
- Actively participate in security
- Enable research facilities

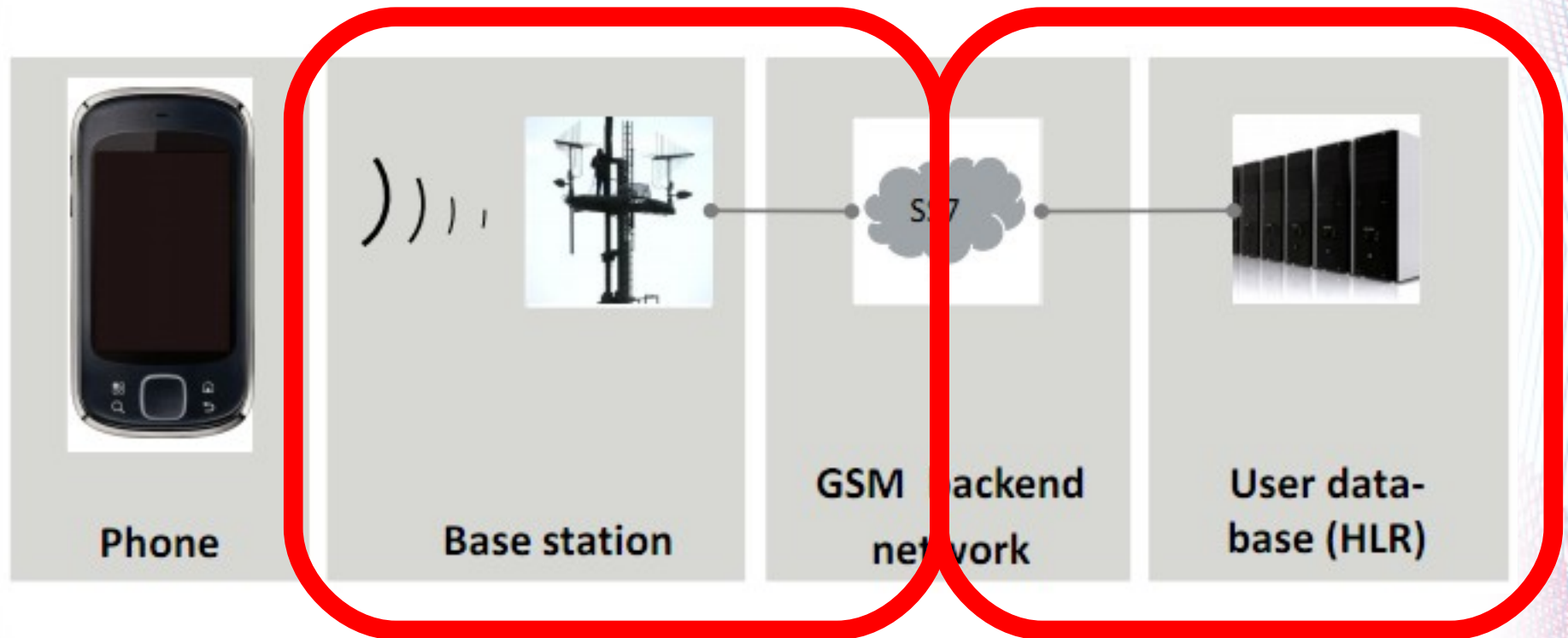
What?

- Mobile Network Operator

What?

- Mobile Network Operator
- Not-for-profit
- “Open” legal basis
 - e.g. “vereniging”

How?



How?

“OpenMobile” NL

“OpenMobile” DE

“OpenMobile” BE

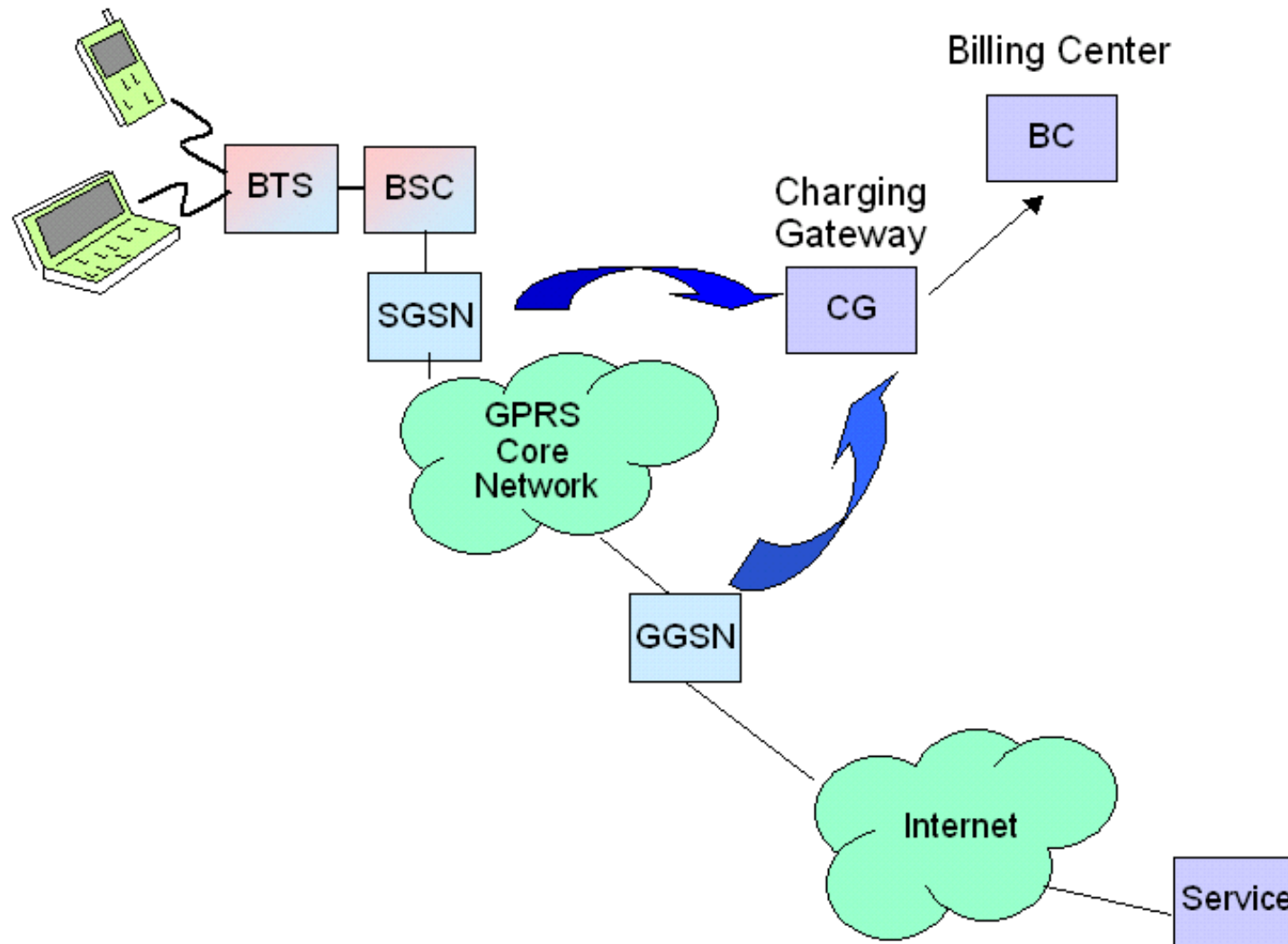
“OpenMobile” FR



How?

- In-network traffic
- VoIP integration
 - So we have GSM carrier
 - And we have IP connection
 - Let's bridge them...

How?



How?

- First: just reseller in .nl
- “Cut the middleman”
- Low-cost / free in-network traffic
- VoIP integration
- Own packet data AP
- Negotiate lower roaming fees

We need help

- Legal advice
- Technical expertise
- Customers

“OpenMobile”

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- @phedny
- @moenenspace
- #moenenspace @ freenode